

TEPP Planning Products Model Procedure

for First Responder Initial Response to Radiological Transportation Accidents

STATES OF PARTS





Transportation Emergency Preparedness Program (TEPP)

Model Procedure for First Responder Initial Response to Radiological Transportation Accidents



Assumptions		2
1.0	Purpose	2
2.0	Scope	2
3.0	Responsibilities	2
4.0	Records	3
5.0	Frequency	3
6.0	References	3
7.0	Equipment	3
8.0	Location	3
9.0	Safety	3
10.0	Terms/Definitions	3
11.0	Response Flow Charts	4
Response Flow Chart Attachment 1 - Initial Arri		val4
Response Flow Chart Attachment 2 - Victims		5
Response Flow Chart Attachment 3 - Fire		6
Response Flow Chart Attachment 4 - Radiologic		al Event7



Model Procedure for First Responder Initial Response to Radiological Transportation Accidents

ASSUMPTIONS

This Transportation Emergency Preparedness Program (TEPP) Model Procedure contains the recommended actions for response to transportation incidents involving radioactive material.

The following assumptions are to be considered when reviewing this Model Procedure for initial response:

- The procedures outlined in this document are not all-inclusive but were developed to meet the minimum national guidance for responding to a transportation accident involving radioactive material.
- This Model Procedure is designed for use by trained and qualified emergency responders. Additional procedural requirements may be implemented according to appropriate state, tribal, or local requirements.
- This Model Procedure should be utilized appropriately, according to the conditions encountered, when arriving at a transportation accident involving radioactive material.
- All emergency response personnel have been trained in the use of an Incident Management System such as the Incident Command System.
- All emergency response organizations are knowledgeable in the use of, and utilize, the Emergency Response Guidebook (ERG) as a tool in determining appropriate response actions.

1.0 PURPOSE

The purpose of this response flow chart is to provide first responders with guidance for response to a transportation accident involving radioactive material.

2.0 SCOPE

This Model Procedure applies to emergency responders respond to transportation accidents that involve radioactive material.

3.0 RESPONSIBILITIES

Emergency responders who respond to a transportation accident involving radioactive material should perform the following:

- 3.1 Size up accident scene using appropriate reference information and sources.
- 3.2 Initiate response actions as outlined in the Emergency Response Guidebook.
- 3.3 Relay information to state, tribal, or local officials as required by jurisdictional policies, plans, and procedures.
- 3.4 Maintain accident scene control until relieved by a higher authority.
- 3.5 Provide accident scene turnover to the relieving authority.



Model Procedure for First Responder Initial Response to Radiological Transportation Accidents



4.0 RECORDS

Insert your jurisdictional policy for records retention here.

5.0 FREQUENCY

Use this flow chart as needed.

6.0 REFERENCES

- 6.1 Emergency Response Guidebook (ERG)
- 6.2 International Association of Firefighters Training for Hazardous Materials Response: Radiation
- 6.3 U. S. Department of Energy Modular Emergency Response Radiological Transportation Training (MERRTT)

7.0 EQUIPMENT

As outlined in the ERG and/or as required by state, tribal or local procedures, plans, or policies.

8.0 LOCATION

Use this Model Procedure as appropriate based upon incident location.

9.0 SAFETY

- 9.1 Respond and perform duties within safety guidelines specified within the Emergency Response Guidebook.
- 9.2 Involve appropriate state, tribal, or local Radiation Authority as soon as possible for assistance with disposition of any contaminated/radiological material.

10.0 TERMS/DEFINITIONS

Contamination - As referred to in this document, contamination is undesired radioactive material that is deposited on the surface of or inside structures, areas, objects, or people.

Decontamination - The reduction or removal of contaminating radioactive material from a structure, area, object, or person.

Incident Commander (IC) - The person responsible for all decisions relating to the management of the incident.

Incident Command System (ICS) - An organized approach to control and manage operations at an emergency incident.

Radiation Authority - A federal, state, or tribal agency designated official. Responsibilities include evaluating radiological hazard conditions during normal operations and emergencies.





Model Procedure for First Responder Initial Response to Radiological Transportation Accidents

11.0 RESPONSE PROCEDURE

See the following First Response Flow Charts for Transportation Accidents Involving Radioactive Materials (Attachments 1 through 4).

RESPONSE FLOW CHART ATTACHMENT 1

Initial arrival on scene

Approach incident cautiously from upwind and upslope. Stay clear of all spills, vapors, fumes and smoke.

Perform scene "size up." Visually assess the accident from a distance. Try to identify the following:

- Spills, leaks, or fire
- Apparent hazardous properties of the cargo
- Victims
- Type of vehicle and containers involved
- Placards and markings
- Container/package damage
- Any person knowledgeable of the scene
- Shipping papers
- Runoff problems; work area hazards; exposure problems
- Entry point

Establish control zones: hot, warm, and cold, upwind and upslope from hazard area.

Notify Emergency Communications Center of the situation and assume position of Incident Commander until relieved by higher authority.

Evaluate information and consult ERG to identify hazards and material involved. Follow guidelines in ERG until other assistance arrives.

Establish initial isolation zone 80 to 160 feet upwind of entry point. Establish lines of communication. Priorities for first responders include the following:

- Safety of response personnel
- Rescue of injured personnel
- Secure the incident scene
- Isolate the area and deny entry
- Ensure safety of people and environment
- Monitor radiation levels (if equipment is available)
- Restrict entry until Radiation Authority or radiological emergency response team arrives

Don protective clothing and SCBA Are there victims? Is there a fire? Is it a radiological event? Follow guidelines in the ERG Yes No Yes No Monitor the Monitor the Use Response Flow Chart Use Use Response situation situation Attachment 3 Response Flow Flow Chart and Chart and Attachment1 standby Attachment 2 standby



DEPARTMENT OF ENERGY

i tools

Model Procedure for First Responder Initial Response to Radiological Transportation Accidents

RESPONSE FLOW CHART ATTACHMENT 2

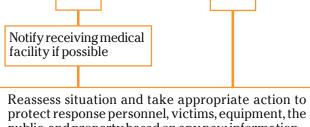
Accident involving victims

VICTIMS Walking wounded or uninjured Non-walking wounded Assess and triage victims Detain walking wounded and uninjured persons who you suspect may have come in contact with radiological material and may be contaminated. Keep them in a treatment holding area within the controlled zone. Move victims to a treatment holding area within the controlled zone but away from the hazard area. Perform routine emergency care. Assess and triage victims Treat victims as if contaminated in the Transport treatment area. EMS personnel should: ■ Use SCBA or particulate respirator Yes No (e.g., N95 mask)

- Wear Universal Precautions Personnel Protective Equipment
- Use disposable gloves

Patients should have:

- Oxygen mask (non-rebreather type) placed on their face to limit inhalation or ingestion of airborne contaminants
- Open wounds bandaged to prevent wound contamination
- Outer clothing cut away to remove majority of contamination



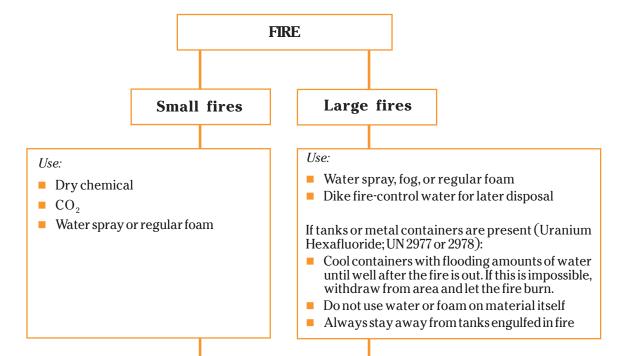
protect response personnel, victims, equipment, the public, and property based on any new information.



Model Procedure for First Responder Initial Response to Radiological Transportation Accidents

RESPONSE FLOW CHART ATTACHMENT 3

Accident involving a fire



Reassess situation and take appropriate action to protect response personnel, victims, equipment, the public, and property based on any new information.



i tools

Model Procedure for First Responder Initial Response

to Radiological Transportation Accidents

RESPONSE FLOW CHART ATTACHMENT 4

Accident involving radiological material

RADIOLOGICAL EVENT

- Call emergency response telephone number on the shipping papers. If shipping papers are unavailable or no answer, call appropriate number listed in the back of the ERG.
- Notify Radiation Authority of the accident situation and conditions.
- Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.
- Isolate spill or leak area at least 80 to 160 feet in all directions. Stay upwind. Keep unauthorized personnel away.
- Detain and/or isolate uninjured persons or equipment suspected to be contaminated.
- Delay decontamination and clean-up until instructions are received from Radiation Authority.
- Follow specific instructions in the ERG for evacuation, fire or explosion, spill or leak information, first aid, and health information.

Use *ERG Guide 163* as the guideline for first response actions and information if the situation is a known radiological event, but no other information is available about the material.

Reassess situation and take appropriate action to protect response personnel, victims, equipment, the public, and property based on any new information.